

REMARKS

Entry of this response and reconsideration and allowance of the above-identified patent application are respectfully requested. Claims 1-43 were rejected in the Office Action. Claims 9 and 33-39 have been canceled. Claims 1, 3, 6, 15, 31, and 40 have been amended. Following entry of the present amendment, claims 1-8, 10-32 and 40-43 will remain pending in the present application.

During a telephone conversation with the Examiner, applicant elected to prosecute the invention of Group I, representing claims 1-32 and 40-43. Applicant has canceled claims 33-39, in Group II, but reserves the right to pursue such claims in a subsequently-filed continuing patent application.

The drawings filed with the application on November 21, 2001 were objected to by the Examiner under 37 C.F.R. 1.84 (m), (p)(1) and (q). The drawings have been corrected and are filed herewith. Also, a red-lined version of Figure 3 is provided to illustrate a typographical correction to Figure 3 to conform with the Detailed Description. Accordingly, applicant respectfully requests acceptance of the drawings. No new matter has been added.

Claim Rejections under 35 USC § 112

The office action contends that claims 1, 3, 5, 6 and 9 are indefinite under 35 USC § 112 ¶ 2. In particular, the office action alleges that claims 3, 5, 6, and 9 are written so as to claim the combination of the mating connector and the flexible contact medium. Applicant appreciates the Examiner's review and comments with respect to these claims. Claims 3 and 6 have been

amended to clarify applicant's invention, which is directed to an electrical contact. Claim 9 has been canceled. Applicant respectfully asserts that claim 5 need not be amended, because the claim provides further description of the flexible contact with regard to the second interface, both of which are positively claimed in independent claim 1.] ...

Next, claims 1-14 were rejected under 35 USC § 112 ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as his invention. In particular, the office action alleges that claim 1 recites "an electrical contact," yet it is unclear how the structure in claim 1 conducts electricity. Applicant respectfully disagrees with this contention.] ?

Accordingly, applicant respectfully requests withdrawal of the rejection of claims 1-14 under 35 USC § 112 ¶ 2.

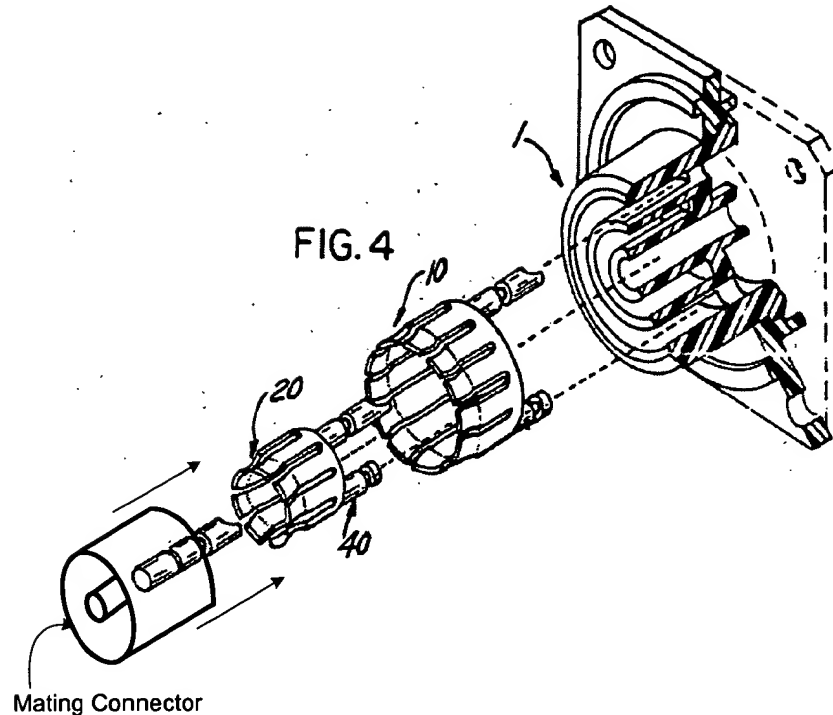
Claim Rejections under 35 USC § 102

Claims 1-32 and 40-43 stand rejected under 35 USC § 102 (e) as being anticipated by Williams *et al.* (U.S. Patent No. 4,593,464) ("Williams"). In particular, the office action contends that Williams discloses an electrical contact having, *inter alia*, a second interface that prevents a flexible contact medium from being distorted by a mating connector. Applicant respectfully disagrees. Although Williams describes a triaxial connector having connection "fingers," nowhere does Williams teach or even provide a hint of suggestion that the fingers are protected from being undesirably bent toward the center of the electrical contact by the mating connector, as with the amended claims of the present invention.]

As discussed in the Background of the Invention section, the present invention overcomes a problem typically found in prior art triaxial pin contacts having a flexible intermediate contact interface. (*Specification* – page 2, line 3). The problem is that the flexible contacts are easily bent or distorted by a mating connector, forcing the flexible contacts toward the center of the pin contact, and perhaps undesirably touch other contacts and making the pin contact unusable. (*Specification* – page 2, lines 5-10). This consistently has been a problem in the prior art devices; a problem readily reflected in the connector structure provided by Williams.

The present invention overcomes this limitation in the prior art by providing an interface that prevents the flexible contact from being bent toward the center of the electrical contact by the mating connector. For example, in one just embodiment discussed with reference to Figure 3 of the present application, a first insulator 103 has a flanged portion 301. The front end of the flexible members 105 are seated below the flanged section 301, so as to provide a protective “ledge” or curved rim under which flexible members 105 are located. (*Specification* – page 7, lines 20-22). The protective ledge guides a mating connector to ride along the flanged portion 301 so as to ensure that the mating connector does not undesirably bend the intermediate contact 104 inward toward the center conductor 108.

Williams does not teach or suggest any structure that may be even remotely construed to provide the present invention. In fact, the connector provided by Williams suffers from the same limitations as other prior art connectors. The Williams connector is show below:



As shown, a mating connector (not shown in Williams' Figure 4) that is designed to make connection with a center conductor, may be so large as to make contact with the outer side of a second tubular connector 20, and undesirably move the flexible connector 20 toward the center of the connector structure. Such undesired movement of the flexible connector is not prevented by Williams' housing 1, because housing 1 does not prevent the mating connector from being disposed between the flexile connector 20 and the housing 1. There is no teaching in Williams to overcome this problem. In fact, Williams does not even acknowledge that such a problem exists. This is to be expected because as the title of Williams suggests, Williams is directed to a

“Method of Making a Triaxial Connector” to avoid “loose connection between the conductors” and the housing to which the conductors are connected. (*Williams* – column 1, lines 1-2; column 1, lines 21-26) (emphasis added).

Accordingly, because Williams does not teach or even suggest the claimed invention, applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102 (e).

CONCLUSION

In view of the foregoing, Applicant respectfully submits that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Vincent J. Roccia, at (215) 564-8946 to discuss resolution of any remaining issues.

Respectfully submitted,

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Marked up versions of claims 1, 3, 6, 15, 31, and 40, which are amended herein, showing all of the changes relative to the previous version of each.

1. (Amended) An electrical contact, comprising:

a rear end having a first interface; and

a front end having a second interface to a connector, wherein the second interface prevents a flexible contact medium on the electrical contact from being bent toward the center of the electrical contact [distorted] by the connector.

3. (Amended) The electrical contact of claim 1, wherein [a front end of the flexible contact medium is isolated from the connector by a flange on] the second interface comprises a flange that isolates a front end of the flexible contact medium from the connector.

6. (Amended) The electrical contact of claim 1, wherein [a front end of the flexible contact medium is isolated from the connector by a curved rim on] the second interface comprises a curved rim that isolates a front end of the flexible contact medium from the connector.

15. (Amended) An electrical contact, comprising:

an intermediate contact having a flexible connection medium;

an outer contact surrounding the intermediate contact;

a first insulator surrounding the intermediate contact and the flexible connection

medium, wherein the first insulator provides electrical isolation of the intermediate contact from the outer contact, and wherein the first insulator has a front face that protects the flexible connection medium from being bent toward the center of the electrical contact [distorted] by an electrical connector, and wherein the outer contact surrounds the first insulator; and

a center contact surrounded by the intermediate contact.

31. (Amended) An electrical connector, comprising:

a shell;

an electrical contact located within the housing, comprising:

a rear end having a first interface, and

a front end having a second interface to a connector, wherein the

second interface prevents the electrical contact from being bent toward the center of the electrical contact [distorted] by the connector; and

at least one other electrical contact located within the shell.

40. (Amended) A pin contact, comprising:

an outer contact;

an intermediate contact surrounded by the outer contact, wherein the intermediate contact has an outer insulative body and an inner flexible conductive body, and wherein the outer

insulative body prevents the inner flexible conductive body from being bent toward the center of the electrical contact [distorted] by a connector mating with the pin contact; and
a center contact surrounded by the outer contact and the intermediate contact.